

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER No. R2-2004-0035

WASTE DISCHARGE REQUIREMENTS AND WATER QUALITY CERTIFICATION FOR:

**SHAPELL INDUSTRIES OF NORTHERN CALIFORNIA AND PONDEROSA HOMES**

**ALAMO CREEK PROJECT, UNINCORPORATED CONTRA COSTA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter Board, finds that:

1. Shapell Industries of Northern California (hereinafter Shapell) proposes to construct a master planned residential development (hereinafter Project) on 609.5 acres located between Tassajara Creek and Alamo Creek at the base of Mount Diablo, in an unincorporated portion of Contra Costa County, east of the Town of Danville. Shapell will develop approximately 236 acres of the proposed project, and Ponderosa Homes will develop a portion of the project that is approximately 12 acres in size, located adjacent to Camino Tassajara (hereinafter Ponderosa parcel). Shapell and Ponderosa Homes are hereinafter collectively referred to as the Dischargers. This Order includes separate Provisions for each developer.
2. The Project includes approximately 923 residential units, 9 neighborhood parks, a community center, a fire station, an elementary school, and soccer fields. The Project will involve grading about 297 acres of land, and about 248 acres will be permanently developed. Included in the design is construction of infrastructure (roadways, sanitary sewer pipelines, storm sewer pipelines, potable and reclaimed water lines, secondary streets, etc.) that is needed to service the homes and other facilities. The Project includes approximately 297 acres of land within the site boundaries that will be preserved as open space. Approximately 269 acres of this land will be preserved and managed under a perpetual conservation easement.
3. Grading of the site prior to building will occur primarily in two phases. The first phase will involve grading of the northern portion of the site for widening of Camino Tassajara. The second phase will involve mass grading of the remainder of the site, which includes the southern portion of the site that will be developed.
4. The Project site is characterized by gentle to steeply sloping hills dominated by non-native annual grassland. The Project is bordered on the north by Camino Tassajara and the Blackhawk development, on the west by the Wendt Ranch development (including dedicated open space land), on the east by open grazing and agricultural land, and on the south by the Hidden Valley open space lands that were established as part of the Windemere development project in Dougherty Valley.

5. The majority of the project site falls within the Alamo Creek watershed, with a short segment of Alamo Creek's main branch crossing the northwestern corner. The development will be located in the northern and central portions of the property that is presently dominated by a small valley separated from upper Tassajara Valley to the north and from the Kavar Valley to the south by low ridge lines. The valley runs east-west and is drained by an ephemeral tributary of Alamo Creek. The southern portion of the property is dominated by the east-west trending Kavar Valley, which collects run-off from numerous ephemeral and intermittent streams and eroded gullies that flow into an intermittent stream (Stream F) that is tributary to Alamo Creek. The north-facing slopes in the northeastern corner of the property are not part of the Alamo Creek watershed, but rather drain to Tassajara Creek.
6. There are approximately 4.96 acres of jurisdictional waters of the United States, including creeks, wetlands, and ponds, on the Project site. The site's waters of the United States are comprised of:
  - a. 0.97 acres (4 ponds) stockponds and natural ephemeral pond;
  - b. 1.07 acres of seasonal wetlands (26 seeps, 1 seasonal wetland);
  - c. 2.21 acres (5,150 linear feet) perennial freshwater stream (Alamo Creek);
  - d. 0.26 acre (2,583 linear feet) intermittent and ephemeral streams with wetland vegetation; and,
  - e. 0.45 acres (12,620 linear feet) intermittent and ephemeral streams with no wetland vegetation.
7. The Project will result in the direct placement of fill into and/or other permanent disturbance of approximately 0.9 of the site's 4.96 acres of jurisdictional waters of the United States, including wetlands, and other waters on the Project site. This impact is comprised of the filling of:
  - a. 0.59 acres of seasonal wetlands (10 seeps);
  - b. 244 linear feet of perennial freshwater stream with wetland characteristics (0.19 acres of Alamo Creek, for a culvert extension, buried rock underneath the Casablanca Bridge, and two grade-control features with buried rock);
  - c. 555 linear feet of intermittent and ephemeral streams with wetland characteristics (0.05 acres); and,
  - d. 1,305 linear feet of intermittent and ephemeral streams with no wetland characteristics (0.07 acres).
8. Waters on the Project site serve as habitat for the Federally threatened California Red-Legged Frog (*Rana aurora draytonii*, hereinafter CRLF). In addition, waters on the site also provide for ground water infiltration, modification of the hydrograph for associated downstream flows, and for the transport of sediment and nutrients downstream.

9. The U.S. Army Corps of Engineers (Corps) has initiated consultation with the United States Fish & Wildlife Service (USFWS) regarding the CRLF and other Federally threatened and/or endangered species on the project site.
10. Development of the Project could increase pollutant load, the volume of stormwater discharged from the site, and the velocity and duration of the flows in the receiving waters. Impacts to beneficial uses of Alamo Creek and downstream waters could result from discharge of sediments and construction wastes during construction. In addition, the proposed roads, parking, homes, and other structures will indirectly impact beneficial uses through the discharge of urban runoff pollutants (e.g., oil and grease, heavy metals, pathogens, nutrients, pesticides, etc.). The post-construction modification of the runoff hydrograph from the new development could cause an increase in peak flows, and the duration and velocity of flows in the Creek. Such changes in the runoff hydrograph can cause unnatural erosion and deposition of sediments in creeks and otherwise impact water quality and beneficial uses of waters.
11. **Mitigation Plan:** To mitigate for its permanent fill of approximately 0.9 acres of seasonal wetlands, seeps, and creeks, Shapell will complete the mitigation proposed in its "Conceptual Mitigation and Monitoring Plan, Alamo Creek Project, Danville, California, Corps File No. 24832S," dated April 3, 2003, and prepared by LSA Associates, Inc. (Conceptual Mitigation Plan), as modified in accordance with the Provisions of this Order.
12. Additional information regarding the mitigation measures to be completed as part of the Project is included in the following documents that have been submitted to the Board: (1) "Response to Regional Water Quality Control Board's Comments on Application for Water Quality Certification" (hereinafter Response). This document is dated August 29, 2003, and was prepared by Shapell, LSA Associates, Inc. (LSA), Engeo Associates, dk Associates, and Sheppard Mullin Richter & Hampton; (2) a letter from Engeo Associates to Shapell Industries, dated November 27, 2003, and titled "Mitigation Site Hydraulic Calculations"; (3) a dk Associates "E Street Exhibit" drawing, dated January 6, 2004, showing an amphibian escape depression detail; and, (4) a January 23, 2004, report titled "Upper Main Branch Alamo Creek Technical Design Basis Report for County Files DA0036". This report was prepared by Engeo Associates, and includes drawings dated April 26, 2004.
13. The Conceptual Mitigation Plan is acceptable to the Board, as modified in accordance with the Provisions of this Order. The proposed mitigation consists of the following:
  - a. Seasonal Wetlands Creation - A minimum of 1.3 acres of freshwater seasonal wetlands and seeps will be created on site within the open space lands located to the south and west of the development;
  - b. Freshwater Pond Creation - A minimum of one new pond that provides new CRLF breeding and rearing opportunities will be created within the open space area on the site. The pond will be approximately 0.24 acres in size;
  - c. Freshwater Pond Enhancement - Three existing freshwater ponds, encompassing approximately 0.96 acres, will be enhanced to improve habitat value for CRLF

- breeding ponds. Enhancement measures include dam rehabilitation, shoreline planting, and possible deepening;
- d. Freshwater Creek Enhancement - In the Kavar Valley, Shapell will implement a stream and watershed restoration and enhancement program on the 215 acres of the on-site mitigation lands. The enhancement efforts will include measures to improve stream channel conditions, habitat value and water quality along Stream F (tributary to Alamo Creek) and its tributaries over a length of approximately 13,343 linear feet (0.59 acres), and the creation of new ephemeral channels encompassing approximately 740 linear feet (0.019 acres). In Alamo Creek, Shapell will be removing three old culverts, installing several grade control structures, and restoring, stabilizing and planting the banks along a stream reach of approximately 1,780 linear feet. This work includes restoration of the banks at a number of locations along the creek to the south of the Casablanca bridge;
  - e. Placement of a conservation easement over, and dedication in fee title of approximately 269 acres of undeveloped open space and mitigation areas to the Wendt Ranch Geologic Hazard Abatement District (West Branch GHAD), or other entity acceptable to the Executive Officer;
  - f. Construction and maintenance of fencing on the Project site to protect creeks, wetlands and stock ponds from grazing impacts; and,
  - g. Implementation of an approved Grazing Management Plan (Grazing Plan) on open space areas. The Grazing Plan will provide for reduction of fuel loads in a manner that is protective of riparian habitat and water quality.
14. A Draft Biological Assessment for the Project, prepared by LSA Associates and dated April 2, 2003, addresses biological conditions at the site, including the status of the CRLF. This report includes a description of mitigation actions that will be taken to compensate for impacts to the CRLF, and other species of concern to the USFWS.
15. **Post-Construction Stormwater and Hydromodification Management:** Shapell has submitted a "Stormwater and Hydrograph Management Plan, Alamo Creek Development" (hereinafter SWMP), prepared by Engeo Incorporated, and dated February 10, 2003. Additional information on stormwater and hydromodification was submitted in the following documents: (1) the Response; (2) in material submitted during meetings held on October 28 and November 24, 2003; (3) in a letter dated December 8, 2003, titled "Addendum Response to Storm Water Management Study" by Engeo Incorporated; (4) a dk Associates map showing sidewalk widths titled "Alamo Creek Conversion Confirmation Map, COA #107, 108, 113A & 113 C, Revised January 6, 2004, Sheet 1 of 7"; and, (5) a dk Associates drawing, "Preliminary Tree Well Exhibit", dated January 7, 2004. The SWMP, inclusive of all supplemental documents, is acceptable to the Board, with the submittals listed in the Provisions. The plan includes the following measures to address the Project's post-construction urban runoff impacts:
- a. Construction of a bioretention treatment facility to capture and treat stormwater runoff from an area of approximately 174 acres. This bioretention facility will be designed to treat a total of approximately 4.0 acre-feet of water. In the event that the Contra Costa County Public Works Department does not approve the proposed

- bioretention facility, Shapell shall construct a water quality basin that will provide an equivalent level of treatment, at the location proposed for the bioretention facility;
- b. Discharge of stormwater runoff from an area of approximately 52 acres will be directed to the Wendt Ranch detention basin (Wendt basin) for water quality treatment;
  - c. Implementation of standard source controls and site design measures, including storm drain inlet stenciling, street sweeping, and covered trash enclosures. Other site designs include reduced sidewalk widths throughout much of the development, installation of bioretention treatment features along several main roadways, and installation of tree wells along streets within the development as specified in the above described documents; and,
  - d. Detention of stormwater flows in the Wendt basin, to address potential impacts to the Creek from changes in the runoff hydrograph.
16. The stormwater runoff from the Ponderosa parcel will not be treated in the site's bioretention facility, or the Wendt basin. Instead, stormwater from the Ponderosa parcel will be treated within the housing development prior to release from the parcel. This Order requires Ponderosa Homes to submit a proposed plan for stormwater treatment for this parcel for approval by the Executive Officer.
17. If it is determined that use of a bioretention facility is not feasible for treatment of a portion of the stormwater runoff from the Project, then a water quality pond will be constructed to treat and manage stormwater at the site. If a water quality pond were used at the site, its intended function would be to treat urban runoff. Therefore, pursuant to Board Resolution Number 94-102, "Policy on the use of constructed wetlands for urban runoff pollution control", a water quality pond would not be considered to be Waters of the United States. As long as any such pond is operated and regularly maintained as an urban runoff treatment system, maintenance and other work completed in it would not require water quality certification pursuant to Section 401 of the Clean Water Act.
18. **Financial Assurance:** Shapell has agreed to provide proof of financial assurances adequate to ensure the construction, success, and preservation in perpetuity of the proposed mitigation and other measures. Provisions of this Order require Shapell to submit detailed cost estimates to cover these activities, as well as a proposed and final means to provide for these costs.
19. **Long-Term Management of Open Space:** Shapell has submitted a "Draft Resource Management Plan, Alamo Creek Open Space Lands (Draft RMP)". The plan was prepared by LSA, and is dated December 10, 2003. The plan includes a draft Grazing Plan for the open space areas. The Draft RMP is acceptable to the Board, with the required submittals and revisions listed in the Provisions. This Order requires that a detailed Grazing Plan be submitted for review and approval by the Executive Officer.
20. The seasonal wetlands, ponds, and stream restoration mitigation areas and open space noted in Finding 13 shall be subject to a conservation easement pursuant to California Civil Code

section 815-816. The easement shall provide in perpetuity for the protection of the area for the purposes of retaining the land in its natural and open-space condition, and shall be held by a non-profit entity satisfying the requirements of § 815.3 of the California Civil Code. Shapell shall submit the conservation easement for review and approval pursuant to the Provisions of this Order.

21. The long-term management of the mitigation sites will be transferred to an appropriate land management group or agency, subject to the approval of the Executive Officer. This Order requires Shapell to submit analyses estimating the endowment amount necessary for appropriate management, in perpetuity, of the conservation areas. This Order requires Shapell to work with a third party land manager accepted by the Board to finalize the determination of the amount of money that is necessary for an endowment fund to adequately finance the monitoring and perpetual management and maintenance of the preserve and endangered species habitat protection areas. Shapell is required to submit this determination to the Board, acceptable to the Executive Officer.
22. The Wendt Ranch GHAD includes a Plan of Control that specifies activities to be implemented, including ongoing maintenance and monitoring geologic hazard abatement. The Plan of Control for the Wendt Ranch GHAD will need to be modified to include provisions for the open space areas on the Project site.
23. The Dischargers submitted an initial application for Water Quality Certification and Waste Discharge Requirements on April 3, 2003. The application was subsequently completed by additional submittals. On June 13, 2003, the Corps issued a Public Notice for a proposed Individual Permit for the Project (Corps File No. 24832S) pursuant to Section 404 of the Clean Water Act. The Corps has not yet issued an individual permit for the Project.
24. The Board has determined to regulate the proposed discharge of fill materials into waters of the State by issuance of Waste Discharge Requirements (WDRs) pursuant to Section 13263 of the California Water Code (CWC) and 23 CCR §3857, in addition to issuing certification pursuant to 23 CCR §3859. The Board considers WDRs necessary to adequately address impacts and mitigation to beneficial uses of waters of the State from the Project, to meet the objectives of the California Wetlands Conservation Policy (Executive Order W-59-93), and to accommodate and require appropriate changes over the life of the Project and its construction.
25. State authority to regulate the discharge, and threatened discharge of waste to Waters of the State, including surface water, groundwater, and wetlands was granted to the State Water Resources Control Board in the Porter-Cologne Water Quality Act (Act). Water Quality Control Plans implement the Act by designating the beneficial uses to be protected, and the water quality objectives reasonably required for those beneficial uses.
26. The Board, on June 21, 1995, adopted, in accordance with Section 13240 et. seq. of the CWC, a revised Water Quality Control Plan, San Francisco Bay Basin (Basin Plan). The State Water Resources Control Board and the Office of Administrative Law approved this updated and consolidated revised Basin Plan on July 20, 1995, and November 13, 1995,

respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. This Order is in compliance with the Basin Plan.

27. The wetlands, seasonal creeks, and other waters on the Project site are located in the South Bay Basin, and are adjacent to or tributary to Alamo Creek. The Basin Plan does not explicitly identify beneficial uses for these waters. However, the Basin Plan states that “[t]he beneficial uses of any specifically identified water body generally apply to all of its tributaries.” Alamo Creek is tributary to Arroyo de la Laguna, Alameda Creek, and the San Francisco Bay. Beneficial uses identified in the Basin Plan for Alameda Creek are as follows: agricultural supply, cold freshwater habitat, ground water recharge, fish migration, water contact recreation, non-contact water recreation, fish spawning, warm freshwater habitat, and wildlife habitat.
28. The Basin Plan Wetland Fill Policy (policy) establishes that there is to be no net loss of wetland acreage and no net loss of wetland value when the project and any proposed mitigation are evaluated together, and that mitigation for wetland fill projects is to be located in the same area of the Region, whenever possible, as the project. The policy further establishes that wetland disturbance should be avoided whenever possible, and if not possible, should be minimized, and only after avoidance and minimization of impacts should mitigation for lost wetlands be considered.
29. The goals of the California Wetlands Conservation Policy (Executive Order W-59-93, signed August 23, 1993) include ensuring “no overall loss” and achieving a “...long-term net gain in the quantity, quality, and permanence of wetland acreage and values....” Senate Concurrent Resolution No. 28 states that “[i]t is the intent of the legislature to preserve, protect, restore, and enhance California’s wetlands and the multiple resources which depend on them for benefit of the people of the State.” Section 13142.5 of the CWC requires that the “[h]ighest priority shall be given to improving or eliminating discharges that adversely affect...wetlands, estuaries, and other biologically sensitive areas.”
30. This Order applies to the temporary and permanent fill and indirect impacts to waters of the State associated with the Project, which is comprised of the components listed in Finding 7. Construction of the Project will result in the permanent placement of fill in and/or disturbance of 0.9 acres of jurisdictional waters, including freshwater seasonal wetlands, ponds, and creeks. The permanent impact of this fill on waters was identified as a potentially significant impact in the Environmental Impact Report (hereinafter EIR) certified for the Project.
31. Shapell has submitted an Alternatives Analysis and supplemental information to show that appropriate effort was made to avoid and then to minimize wetland disturbance, as required by the Basin Plan.
32. The permanent impact of the proposed fill on waters was identified as a potentially significant impact in the Camino Tassajara Combined General Plan Amendment Study and

Related Actions (July 9, 2002, State Clearinghouse No. 1999122013, hereinafter EIR) certified for the Project by Contra Costa County.

33. Discharges of storm water associated with construction activity will occur. The CEQA documents certified for the Project identify such discharges, including the pollutants associated with them, as a potentially significant impact. The CEQA documents determined that the project impacts would be considered less-than-significant after mitigation. The Dischargers are responsible for obtaining appropriate permits for these stormwater discharges, including complying with the rules and regulations of National Pollutant Discharge Elimination System (NPDES) permit requirements. This includes complying with the requirements of State Water Resources Control Board Water Quality Order No. 99-08-DWQ, the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (hereinafter General Permit).
34. Because of the Project's proximity to sensitive resources, including special status species habitat, and potential to discharge materials that could significantly impact those resources, this Order requires the Dischargers to submit a Storm Water Pollution Prevention Plan (SWPPP) for the Project, acceptable to the Executive Officer, prepared pursuant to the provisions of the General Permit.
35. Discharges of uncontaminated ground water or other non-storm water during construction may be required. This Order considers such discharges covered by the General Permit, contingent on submittal of an acceptable discharge plan at least 30 days prior to such a discharge.
36. The California Environmental Quality Act (CEQA) requires all projects approved by State agencies to be in full compliance with CEQA, and requires a lead agency (in this case, Contra Costa County) to prepare an appropriate environmental document (e.g., EIR or Negative Declaration) for such projects. The Board finds, after review of the Project's environmental documents described in Finding 29, together with the record before the Board, including any public comments, that all environmental impacts of the proposed activities subject to the Board's review have been identified, and with compliance with the conditions of this Order, will be mitigated to a level of insignificance.
37. Both the Contra Costa County Planning Agency and Department of Public Works have approval authority over a number of aspects of the Project, such as preliminary and final development plans, subdivision maps, site plans, etc. They also issue permits for grading and building, and review and approve any proposed work within the Alamo Creek corridor. In order for Shapell to install some of the mitigation features proposed for the Project, detailed plans for the work will be reviewed for approval by the County.
38. The County will continue to review plans as they become more detailed at different stages during project implementation. It is possible that the County may request changes to the plans for mitigation work within the creek corridors, stormwater best management practices (BMP)s, and other aspects of the Project approved and required by this Order. These changes could affect the quality and nature of the mitigation plan and/or SWMP that are



included as part of the Project approved by this Order. Any changes pursuant to the County's review and approval process that are proposed for the Project that could have an impact on water quality and/or beneficial uses, or result in fill of waters of the State, must be reviewed by the Executive Officer to determine whether the proposed changes are acceptable, and whether additional mitigation will be required to compensate for direct and/or indirect impacts of the changes.

39. Pursuant to 23 CCR Sections 3857 and 3859, the Board is issuing WDRs and Water Quality Certification for the Project as described herein.
40. The Board has notified the Corps, Town of Danville, USFWS, the California Department of Fish & Game (CDFG), Contra Costa County and interested agencies and persons of its intent to prescribe WDRs and Water Quality Certification for this discharge.
41. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
42. This Project is filed at the Board under file number 2119.1242, 2118.03, and site number 02-07-C06-14.

IT IS HEREBY ORDERED that Shapell Industries of Northern California and Ponderosa Homes, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following, pursuant to authority under CWC Sections 13263 and 13267:

**A. Discharge Prohibitions**

1. The direct discharge of wastes, including rubbish, refuse, bark, sawdust, or other solid wastes into surface waters or at any place where they would contact or where they would be eventually transported to surface waters, including flood plains, is prohibited.
2. The discharge of floating oil or other floating materials from any Project activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.
3. The discharge of silt, sand, clay, or other earthen materials from any Project activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.
4. The wetland and creek fill activities and mitigation construction subject to these requirements shall not cause a nuisance as defined in CWC §13050(m).
5. The discharge of decant water from the Project's fill sites, and stockpile or storage areas to surface waters or surface water drainage courses is prohibited, except as conditionally

allowed following the submittal of a discharge plan or plans as described in the Provisions.

6. The ground water in the vicinity of the Project shall not be degraded as a result of the placement of fill for the Project.
7. The discharge of materials other than stormwater, which are not otherwise regulated by a separate NPDES permit or allowed by this Order, to waters of the State is prohibited.
8. The discharge of drilling muds to waters of the State, or to where such muds could be discharged to waters of the State, is prohibited.
9. The discharge of earthen fill, construction material, concrete, aggregate, rock rip-rap, and/or other fill materials to waters of the State is prohibited, except as expressly allowed herein.

**B. Receiving Water Limitations**

1. The discharges shall not cause the following conditions to exist in waters of the State at any place:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam in concentrations that cause nuisance or adversely affect beneficial uses;
  - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; and
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharges shall not cause nuisance, or adversely affect the beneficial uses of the receiving water.
3. The discharges shall not cause the following limits to be exceeded in waters of the State at any one place within one foot of the water surface:
  - a. Dissolved Oxygen: 5.0 mg/L, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors

cause concentrations less than that specified above, then the discharges shall not cause further reduction in ambient dissolved oxygen concentrations.

- b. Dissolved Sulfide: 0.1 mg/L, maximum
- c. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH by more than 0.5 pH units.
- d. Un-ionized Ammonia: 0.025 mg/L as N, annual median; and 0.16 mg/L as N, maximum
- e. Nutrients: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

### **C. Provisions**

1. The Dischargers shall comply with all Prohibitions, Receiving Water Limitations and Provisions of this Order immediately upon adoption of this Order or as provided below.
2. The Dischargers shall submit copies of all necessary approvals and/or permits for the Project, including its associated mitigation, from applicable government agencies, including, but not limited to, the CDFG, USFWS, Contra Costa County, and the Corps. Copies shall be submitted within 60 days after issuance of any permit or other approval.
3. Construction shall not commence on any Project component until all required documents, reports, plans, and studies required in the Provisions associated with that component have been submitted to and found acceptable by the Executive Officer. In all cases where the Dischargers are required to make a submittal acceptable to the Executive Officer, the Executive Officer may determine that construction may begin sooner than the specified number of days for the submittal prior to the beginning of construction.

### Mitigation and Monitoring Plan

4. Not later than 60 days prior to the beginning of construction, Shapell shall submit, acceptable to the Executive Officer, a Final Mitigation and Monitoring Plan (Final MMP) that addresses the proposed on-site mitigation elements. The Final MMP shall incorporate information from the Response and other submittals described in the Findings, as appropriate, and shall include the proposed pond construction and pond enhancement, the creation of seasonal wetlands, the Upper Alamo Creek Action Plan, proposed measures for restoration and/or enhancement of Stream F, and other related work. Upon the Executive Officer's determination that the Final MMP is acceptable, the Executive Officer may determine that construction may begin sooner than 60 days following submittal of the

acceptable report. Shapell shall comply with and implement the Final MMP. The Final MMP must include the following:

- a. A workplan for future submittals of specific details and plans for any creek sections that will be bridged or otherwise crossed, or immediately adjoined by roads, paths, or similar improvements, including livestock crossings, and the Casablanca Bridge;
- b. A schedule providing for mitigation construction to commence prior to or concurrent with the start of Project construction (site grading). The schedule shall provide for all mitigation to be completed within two years of the start of mitigation construction, with the majority completed within one year;
- c. Incorporation of all revisions to the Upper Alamo Creek Action Plan (including drawings), and success criteria for the plan. The revised report and drawings shall specify that rock used in the vicinity of the vortex weir structures be buried, at a minimum, above the 2-year flows for the creek;
- d. Incorporation of monitoring for and reporting on the presence of CRLF in site and mitigation ponds, as described in the Draft Biological Assessment described in the Findings;
- e. Criteria and a schedule for selecting proposed reference sites for the seasonal wetlands;
- f. Revised plans for restoration and enhancement work to be completed in the Kavar Valley;
- g. Provision for use of native plant seeds, and avoidance of non-natives, in the erosion control mix used for hydroseeding in the Kavar Valley, as appropriate;
- h. Revised Table C – Summary of Habitat Avoidance and Impacts;
- i. A plan and schedule for implementation for fencing creeks, wetlands and water bodies on site, to protect them from further degradation due to cattle grazing impacts. This plan shall include specific provisions for supply of water for grazing animals, with a time schedule for implementation. Fencing of creeks and water bodies, and water supply, shall be installed prior to any further grazing on the site; and,
- j. All other information related to this Provision, as appropriate.

#### Pre-Construction Report

5. Not later than 60 days prior to the beginning of any phase of construction on the Project, as identified in the Final MMP, Shapell shall submit, acceptable to the Executive Officer, a pre-construction report that includes all the appropriate details for implementing the mitigation measures included in the phase of construction. The pre-construction report shall include final earth work plans and details, final planting plans, and details such as designs and construction drawings for in-stream structures, pond reconstructions, and irrigation plans. Upon the Executive Officer's determination that the pre-construction report is acceptable, the Executive Officer may determine that construction for the proposed phase may begin sooner than 60 days following submittal of the acceptable report. The report must include the following:

- a. Construction level designs and earth work for all creeks, ponds, and wetlands including appropriate longitudinal and cross sections and plan views;
  - b. An irrigation plan for the mitigation areas where irrigation is proposed; and,
  - c. Planting plans for all mitigation areas.
6. As-built plans for the mitigation sites shall be prepared and submitted to the Board within six weeks of the completion of mitigation site construction.
7. Annual monitoring reports shall be submitted to the Board by December 15 of each monitoring year, as per the Final MMP, and until the sites have met their performance standards and final success criteria and the Executive Officer has accepted in writing a notice of mitigation completion. The mitigation-monitoring period for the Alamo Creek and Stream F restoration and enhancement work shall be a minimum of ten years. Monitoring reports shall be prepared as described, and shall include assessment of all mitigation features with respect to performance criteria established in the Final MMP. Reports shall include methods used, locations sampled, representative photographs, results of monitoring, trends, reference weather conditions, recommendations, and implemented actions. For necessary remedial actions not taken prior to submittal of the report, an implementation schedule shall be provided. Annual reports shall also include the proposed annual grazing and special-status species monitoring, including photographs, residual dry matter monitoring results, summaries of livestock stocking rates (or other appropriate measure of livestock grazing), analyses of trends over time, and all other information, as appropriate.
8. If appropriate reference sites for the mitigation features are not found, then the performance criteria shall be revised, to the satisfaction of the Executive Officer, to include more specific criteria for success.
9. To reduce the potential impacts to water quality during enhancement and restoration of Alamo Creek and/or any other mitigation work, Shapell will divert any flow around construction and/or restoration work within water bodies using a diversion channel, pipe, or other practices such that the water does not flow across the work areas and no equipment operates in areas of flowing or standing water. Any diversions shall be implemented in accordance with the CDFG creek bed alteration agreement for the Project.
10. If any changes are proposed within creek corridors (including design of stormwater outfalls, and trail systems) as a result of Contra Costa County and/or CDFG review of the Project, then Shapell shall submit, for approval by the Executive Officer, all design plans for the proposed modifications, along with a detailed discussion of water quality impacts, future effects of proposed changes on creek channel integrity and stability, any fill amounts, and anticipated time schedule for implementation of the plans. Proposed mitigation for all anticipated additional permanent and temporal impacts shall be included. All impacts shall be considered together as a whole, in order to ensure that proposed mitigation is appropriate for the additive impacts of the potential various changes in design.

11. Not later than 60 days prior to the beginning of construction, Shapell shall submit, acceptable to the Executive Officer, a detailed cost estimate for construction and success of the proposed mitigation measures (e.g., wetland construction, creek restoration and enhancement, fencing, pond construction and enhancement, etc.). Prior to the beginning of construction, Shapell shall submit proof of financial assurances adequate to ensure the construction and success of the proposed mitigation and other measures. This may consist of a bond, certificate of deposit, or other instrument callable by the Board in the event of creek and/or wetland mitigation failure.
12. Any changes to the Final MMP and other plans referenced in the Provisions must be approved in writing by the Executive Officer.

#### Long-Term Management

13. Not later than 60 days prior to the beginning of construction in the southern portion of the development (as described in Finding 3), Shapell shall submit, acceptable to the Executive Officer, a revised Resource Management Plan (RMP) for the on site open space and mitigation areas. This submittal shall include a detailed Grazing Plan, and shall address comments provided by the Board in a letter dated February 26, 2004. The final Grazing Plan shall include a finalized fencing plan and schedule for construction, and all appropriate details for livestock crossings, provision of upland watering sources, and related information. In addition, the Grazing Plan shall specify minimum residual dry matter numbers, and stocking rates that are appropriate for the terrain in the open space area where grazing will occur. The Grazing Plan shall provide for grazing within the pond and seasonal wetland areas only on a limited basis during the dry season to maintain and protect wetland vegetation and reduce fuel loads. This grazing shall be managed to protect the habitat and water quality of these mitigation features.
14. Not later than 60 days prior to the beginning of construction, Shapell shall submit, acceptable to the Executive Officer, a draft conservation easement for the mitigation and open space areas that will be held in the easement. The conservation easement shall be in accordance with California Civil Code section 815-816, and shall be in a form acceptable to the Executive Officer, CDFG, the Corps, and USFWS. The conservation easement holder shall be an entity satisfying the requirements of § 815.3 of the California Civil Code. The drafts shall be finalized within ten months of the date of initial Project site grading, and executed on a phased basis (the phases are as indicated in the Final MMP). The easement for the first phase, covering approximately 199 acres in the Kavar Valley (75% of the conservation area) shall be recorded and submitted to the Executive Officer within twelve months of the start of construction on the northern portion of the site. The easement for the second phase, covering approximately 70 acres, shall be recorded within two months of Contra Costa County approval of the Project's final map for the southern portion of the site.
15. Not later than 60 days prior to the beginning of construction for the southern portion of the development, Shapell shall submit, acceptable to the Executive Officer, a draft agreement with a specific entity or entities appropriate to manage the conservation areas in perpetuity. Upon the Executive Officer's acceptance of the draft agreement, the Executive Officer may

determine that work may begin sooner than 60 days after submittal of the agreement. The draft shall be finalized within 10 months of start of construction in the southern portion of the development. A final executed agreement, acceptable to the Executive Officer, shall be submitted within twelve months of the start of construction for the southern portion of the development. The draft and final agreements shall include a determination regarding what amount of money is necessary for an endowment fund to adequately finance the monitoring and perpetual management and maintenance of the conservation areas.

16. Not later than 90 days after execution of the final agreement for long-term management of the open space areas, Shapell shall establish an endowment or other approved mechanism for funding the long term managers' costs to implement management of the mitigation areas, grazing, bullfrog eradication, invasive weed control, fence maintenance, and other property management costs. At that time, Shapell shall submit, acceptable to the Executive Officer, proof that 25% of the amount determined necessary to fund the long term management has been deposited into an interest bearing account and accepted by the management entity. The remainder of the endowment shall be provided as follows: 25% at completion of the 200<sup>th</sup> unit; 25% at completion of the 400<sup>th</sup> unit; and 25% at completion of the 600<sup>th</sup> unit. Shapell shall submit, acceptable to the Executive Officer, proof of each deposit into the endowment account within two weeks of the funding date. In any event, the entire endowment shall be deposited prior to the transfer of oversight to the land manager.
17. Not later than December 1, 2004, Shapell shall submit a letter report describing the process and anticipated schedule for incorporation of the Project's open space lands into the Wendt Ranch GHAD. This letter shall include discussion of the Plan of Control for the Wendt Ranch GHAD, and an anticipated time schedule for revision of the Plan of Control to include the Project lands. The Plan of Control shall be submitted, acceptable to the Executive Officer, prior to finalizing of the document for use.

#### Stormwater Management

18. Not later than 60 days prior to the beginning of construction, Shapell shall submit, acceptable to the Executive Officer, a SWMP implementation plan. The implementation plan shall include the following:
  - a. A work plan and schedule, acceptable to the Executive Officer, for completion of design plans and construction specifications for the proposed bioretention facility on the Project site, and for bioretention features located along A and E Streets. The schedule shall include an anticipated plan for construction and completion of the facility concurrent with the completion of Project construction. The final design shall include earthwork, drainage, planting plans, soil composition specifications for the bioretention features, and appropriate design details, construction oversight, maintenance access road plans, and all other information as appropriate. This shall also include a workplan and schedule for the submittal of an Operations and Maintenance (O&M) plan that addresses O&M for the facility;

- b. A proposed plan for monitoring of water quality entering and leaving the Wendt basin and the bioretention facility (or pond) on site. This plan shall also provide for monitoring of flow velocities and volumes downstream of the Wendt basin, and flow volumes upstream of the Wendt Basin, and downstream of the bioretention facility (or pond);
  - c. A detailed description of the proposed funding amount and mechanism for that funding, acceptable to the Executive Officer, sufficient to ensure the appropriate O&M of the bioretention facility.
  - d. A proposed entity, acceptable to the Executive Officer, for long-term O&M of the stormwater treatment facility. The SWMP implementation plan shall clearly define the entity responsible for maintenance and operation of the bioretention facility, the Wendt basin, and any other stormwater treatment facilities at different stages of the Project, and shall describe the mechanism for transfer of responsibility once construction is complete.
  - e. The SWMP implementation plan shall include a plan for proactive maintenance of any creek bank and/or bed erosion problems that occur as a result of the water quality treatment facility outfalls and discharge of stormwater. Proactive maintenance shall be included in this plan in order to minimize and avoid future need for any additional hardscape application to creek beds and banks. This plan shall prescribe regular inspection of outfall locations for creek erosion problems, implementation of corrective actions prior to the onset of the following rainy season, and use of bioengineering, low impact techniques wherever possible for remedial measures. Placement of additional rock or hardscape at these locations is not authorized by this Order.
19. Not later than 60 days prior to the start of construction on the Ponderosa parcel, Ponderosa Homes shall submit, acceptable to the Executive Officer, a proposed stormwater management plan for its 12-acre portion of the site adjacent to Camino Tassajara. This plan shall provide treatment for 85% of the average annual storm at the site, and shall include a proposed means for financing long-term management of the treatment facility.
20. The Dischargers shall submit as-built reports within 60 days of the complete installation of proposed water quality treatment features. As-built reports for outfalls shall be submitted within 60 days of installation.
21. Not later than December 1, 2004, Shapell shall submit, acceptable to the Executive Officer, a proposed plan for minimization and/or elimination of chemical application for parks and landscaping in common residential areas. This plan shall be provided to the entity responsible for future maintenance of these areas.
22. Not later than 60 days prior to construction, the Dischargers shall submit, acceptable to the Executive Officer, a SWPPP to address the Project's expected construction stage impacts. The SWPPP shall be prepared according to the requirements and guidance of the General Permit, as may be reissued, amended, or revised.



Contingency Measures

23. If proposed mitigation does not achieve performance criteria after a reasonable portion of the monitoring period, even after remedial measures have been implemented, Shapell shall initiate efforts to define alternative mitigation, either onsite or offsite as necessary to accomplish the goals of the Final MMP.

Notice of Mitigation Completion

24. When Shapell has determined that the mitigation has achieved the final success criteria specified in the Final MMP approved by the Executive Officer, it shall submit a notice of mitigation completion (notice), acceptable to the Executive Officer. The notice shall include a description of the status of the mitigation component that has been determined to be successful, in addition to a status report on the implementation of the RMP, including the Grazing Plan. After acceptance of the notice in writing by the Executive Officer, Shapell's submittal of annual mitigation monitoring reports for that mitigation component is no longer required.

Other Provisions

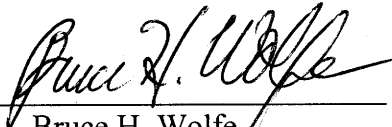
25. All reports pursuant to these Provisions shall be prepared under the supervision of suitable professionals registered in the State of California.
26. The Dischargers shall immediately notify the Board by telephone and e-mail whenever an adverse condition occurs as a result of this discharge. Such a condition includes, but is not limited to, a violation of the conditions of this Order, a significant spill of petroleum products or toxic chemicals, or damage to control facilities that would cause noncompliance. Pursuant to CWC §13267(b), a written notification of the adverse condition shall be submitted to the Board within two weeks of occurrence. The written notification shall identify the adverse condition, describe the actions necessary to remedy the condition, and specify a timetable, subject to the modifications of the Board, for the remedial actions.
27. Should discharges of otherwise uncontaminated ground water contaminated with suspended sediment be required from the Project site, where such discharges are not otherwise covered by an applicable NPDES permit, such discharges may be considered covered by the General Permit, following the submittal of a discharge/treatment plan, acceptable to the Executive Officer, at least 30 days prior to such a discharge.
28. The Dischargers shall notify the Board in writing at least 30 days prior to actual start dates for each Project component (i.e., prior to the start of grading or other construction activity for any Project component, including the creek and wetland mitigation components).
29. The Dischargers shall at all times fully implement and comply with the engineering plans, specifications, and technical reports submitted with its application for water quality certification and the report of waste discharge, and as may subsequently be submitted to

comply with this Order.

30. The Dischargers are considered to have full responsibility for correcting any and all problems that arise in the event of a failure that results in an unauthorized release of waste or wastewater.
31. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, shall be disposed of in accordance with applicable state and federal regulations.
32. The Dischargers shall remove and relocate any wastes that are discharged at any sites in violation of this Order.
33. In accordance with CWC §13260, the Dischargers shall file with the Board a report of any material change or proposed change in the ownership, character, location, or quantity of this waste discharge. Any proposed material change in operation shall be reported to the Executive Officer at least 30 days in advance of the proposed implementation of any change. This shall include, but not be limited to, all significant new soil disturbances, all proposed expansion of development, or any change in drainage characteristics at the Project site. For the purpose of this Order, this includes any proposed change in the boundaries of the area of wetland/waters of the State to be filled.
34. The following standard conditions apply to this Order:
  - a. Every certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC §13330 and 23 CCR §3867.
  - b. Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR §3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
  - c. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR §3833 and owed by the Dischargers.
35. The Dischargers shall maintain a copy of this Order at the Project site so as to be available at all times to site operating personnel and agencies.
36. The Dischargers shall permit the Board or its authorized representative at all times, upon presentation of credentials:
  - a. Entry onto Project premises, including all areas on which water body fill or water body mitigation is located or in which records are kept.

- b. Access to copy any records required to be kept under the terms and conditions of this Order.
  - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.
  - d. Sampling of any discharge or surface water covered by this Order.
37. This Order does not authorize commission of any act causing injury to the property of another or of the public; does not convey any property rights; does not remove liability under federal, state, or local laws, regulations or rules of other programs and agencies, nor does this Order authorize the discharge of wastes without appropriate permits from other agencies or organizations.
38. The Board will consider rescission of this Order upon Project completion and the Executive Officer's acceptance of notices of completion of mitigation for all mitigation, creation, and enhancement projects required or otherwise permitted now or subsequently under this Order.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 19, 2004.

  
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Bruce H. Wolfe  
Executive Officer